

Water Use Efficiency Annual Performance Report - 2012

WS Name: YAKIMA WATER DIVISION, CITY OF

Water System ID# : 99150

WS County: YAKIMA

Report submitted by: *David Brown*

Meter Installation Information:

Estimate the percentage of metered connections: *100%*

If not fully metered - Current status of meter installation:

Production, Authorized Consumption, and Distribution System Leakage Information:

12-Month WUE Reporting Period: *01/01/2012* To *12/31/2012*

Incomplete or missing data for the year? *No*

If yes, explain:

Distribution System Leakage Summary:

Total Water Produced and Purchased (TP) – Annual Volume	3,724,475,000 gallons
Authorized Consumption (AC) – Annual Volume	3,249,200,000 gallons
Distribution System Leakage – Annual Volume TP – AC	475,275,000 gallons
Distribution System Leakage – Percent DSL = $[(TP - AC) / TP] \times 100$	12.8 %
3-year annual average	13.7 %

Goal-Setting Information:

Date of Most Recent Public Forum: *07/05/2011* Has goal been changed since last performance report? *No*

Note: Customer goal must be re-established every 6 years through a public process

WUE Goals:

Customer Goal (Demand Side):

Maintain the current residential per capita use of 74.9 through July 2017 (average water use per person per day). As this is a very low per person use no additional water savings is expected. The city has a separate irrigation supply so reducing this very low per capita rate will be very difficult.

Describe Progress in Reaching Goals:

Customer (Demand Side) Goal Progress:

Conservation Rate Structures are already in place. The Rate Structure has gone from 5 declining blocks to one block in 2009. A Rate Study is scheduled for 2012 where additional conservation rates will be analyzed. Water bill showing consumption history for both Residential and Industrial/Commercial implemented with the new billing system April 2010. Customers will have access to their billing records including water use through an internet portal beginning in late 2013. Education measures identified in the 2011 Water System Plan update are ongoing. The current residential per capita use in the 2011 Water System Plan the average per capita use was 74.9 gallons per capita per day. The 2011 per capita use has remained approximately the same. The per person use is very low and we have determined further reduction in per person use is not financially feasible at this time. The per person use will be analyzed again in the 2017 Water System Plan Update. Automated meter reading system is projected to be installed by 2014, which replaces all meters. This automated system will allow water use, consumption and DSL to be calculated every 24 hours. We have been conducting audits to determine proper meter size and have replaced over 100 meters with smaller appropriate sized meters. We have an intensive meter calibration program for all meters over 1 1/2 inch. Public education, water use graph and the economy have resulted in lower total use.

Additional Information Regarding Supply and Demand Side WUE Efforts

Include any other information that describes how you and your customers use water efficiently:

Reduce Distribution System Loss to 10% or less by July 1, 2015. There was good progress last two years, due mostly to improved meter reading accuracy. The new utility billing system has been implemented making it possible to accurately account for use/consumption. Currently meters are read and billed on a bimonthly basis, so water loss cannot be accurately calculated. Automated meter reading Infrastructure (AMI) is being implemented, this will allow daily water loss calculations. Implementation is scheduled to begin in early 2013 and be completed in 2014. Leak detection surveys are conducted every few years. In 2008 & 2009, some leakage was found and eliminated. A leak survey was conducted on the 8 mile transmission main in May 2011 and no leaks were discovered. We believe the actual DSL is below 10% already. Because of numerous errors identified in current meter reading, such as miss reads and read estimates, it is assumed that well over half of the calculated DSL can be attributed to these errors, however a significant improvement has occurred in 2012. As noted previously, a new billing system is in place and the implementation of an automated meter reading system will begin in early 2013. Additional steps implemented to reduce DSL include: A large meter calibration program (some water loss due to inaccurate meters). Audits of plumbing demand so meters can be properly sized. Over 100 meters have been replaced with smaller properly sized meters. Two metered fill stations for use by street sweepers and for other city uses has been installed and several more are in planning, this will allow more accurate tracking of water use. Developed a program to more accurately account for water used for other city uses – such as fire fighting and fire training, street sweepers and other water tanker type trucks. In the scheduled 2012 Rate Study the rate charged for uses such as for street sweeping will be analyzed. The City has adopted the latest Uniform Building Codes which mandate low use plumbing fixtures.

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